

1. An apparatus comprising:

(a) a plurality of access points, wherein each of said access points performs a first protocol service for a respective network, and wherein the correctness of said first protocol service is based on a maximum timing delay; and

(b) a central controller for:

(i) receiving an input signal from each of said plurality of access points,
and

(ii) transmitting to each of said plurality of access points an output signal based on the input signal from that access point and a second protocol service, wherein the correctness of said second protocol service is independent of said maximum timing delay.

2. The apparatus of claim 1 wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer.

3. The apparatus of claim 2 wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

4. The apparatus of claim 1 wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.

5. The apparatus of claim 1 wherein said central controller is also for:

(iii) receiving a datum via a wide-area network, and

(iv) transmitting said datum to at least one of said access points.

6. The apparatus of claim 1 wherein each of said access points is also for receiving a first datum from said central controller and for transmitting a second datum based on said first datum to at least one station in said respective network.

7. A method comprising:

(a) performing a first protocol service with a first processor, wherein the correctness of said first protocol service is based on a maximum timing delay;

(b) transmitting a first signal to a second processor, wherein said second processor is for performing a second protocol service, and wherein the correctness of said second protocol service is independent of said maximum timing delay; and

(c) receiving from said second processor a second signal based on said second protocol service.

8. The method of claim 7 further comprising (d) detecting a first condition, wherein (a) is in response to (d).

9. The method of claim 8 wherein said first condition comprises the transmission of a signal over a shared-communications channel.

10. The method of claim 8 wherein said first condition comprises an idle time interval for a shared-communications channel.

11. The method of claim 8 further comprising (e) detecting a second condition, wherein (b) is in response to (e).

12. The method of claim 11 wherein said second condition comprises the transmission of a signal over a shared-communications channel.

13. The method of claim 11 wherein said second condition comprises an idle time interval for a shared-communications channel.

14. The method of claim 7 further comprising (d) detecting a condition, wherein (b) is in response to (d).

15. The method of claim 14 wherein said condition comprises the transmission of a signal over a shared-communications channel.

16. The method of claim 14 wherein said condition comprises an idle time interval for a shared-communications channel.

17. The method of claim 7 wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer.

18. The method of claim 17 wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

19. The method of claim 17 wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.

20. A method comprising:

- (a) performing a first protocol service for a first network at a first processor, wherein the correctness of said first protocol service is based on a maximum timing delay;
- (b) performing said first protocol service for a second network at a second processor;
- (c) transmitting a first signal from said first processor to a third processor;
- (d) performing a second protocol service for said first network at a third processor, wherein the correctness of said second protocol service is independent of said maximum timing delay;
- (e) transmitting a second signal from said third processor to said first processor, wherein said second signal is based on said second protocol service;
- (f) transmitting a third signal from said second processor to said third processor;
- (g) performing said second protocol service for said second network at said third processor; and
- (e) transmitting a fourth signal from said third processor to said second processor, wherein said fourth signal is based on said second protocol service.

21. The method of claim 20 wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer.

22. The method of claim 21 wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

23. The method of claim 20 wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.